

Sociology and Social Research

AN INTERNATIONAL JOURNAL

Sociology in Latin America	87
NATHAN L. WHETTEN	
British National Health System	92
GEORGE B. MANGOLD	
Law in American Sociology	99
F. JAMES DAVIS	
Sex and Juvenile Referrals	106
D. C. GIBBONS AND M. J. GRISWOLD	
Introductory Statistics and Sociology . .	111
DANIEL O. PRICE	
Mobility and Mental Health on Oahu . .	115
ROBERT C. SCHMITT	
Personal Adjustments of Older People .	119
CHARLES T. O'REILLY	
The Evolution of Housing	122
EMORY S. BOGARDUS	
Pacific Sociological News	128
Social Theory and Research 129	Peoples and Culture . . . 154
Social Problems and Welfare 143	Other Publications Received 157

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November-December 1957



SOCIOLOGY IN LATIN AMERICA

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University of Connecticut

It seems almost axiomatic that any discipline aspiring to become a science will develop faster if it is promoted by scholars living and working under widely varying social situations. One of the many reasons for the more rapid development of the physical and biological sciences has been the ability of their scientists to introduce different combinations of factors into the experimental situation and thus measure the results attributable to the variables. The social scientists cannot exert such laboratory control on their data. They do have considerable opportunity, however, to introduce different sets of variables by studying societies and population groups which are characterized by different traditions, customs, institutions, and social values. This cross-cultural approach tends to provide the social scientists with something approximating the types of controls introduced by the physical and biological scientists in their laboratories.

It would thus appear that the wider the discipline of sociology can be extended into different societies of the world, the greater will be the opportunities for measuring, eliminating, or taking into account the influences of different types of variables. For this reason, it seems appropriate to examine briefly the development of sociology among our southern neighbors in the Latin-American republics.

I

From the very beginning, sociology in Latin America has been strongly influenced by European patterns. This influence has continued in large part even to the present time. French positivism after the order of Auguste Comte and others predominated for many years. Later, Durkheim, Tarde, and Max Weber found many followers. Social philosophy and the history of social ideas have invariably played a prominent role

in sociological literature.¹ Little emphasis, however, has been given as yet to the development of a scientific sociology involving the careful formulation of hypotheses and the testing of these through empirical observations, field research, and statistical analysis.

In addition to the philosophical and historical writings, there have appeared, especially in recent years, a great many articles and monographs slanted toward social welfare. Practical social problems receive a great deal of attention, especially in those countries where serious attempts are being made to integrate the Indian into the national life and to improve the living conditions of the laboring population as a whole. Perhaps this emphasis is a normal expectation in underdeveloped countries where standards of living are beginning to rise and where there are hope and sincere aspiration to overcome the widespread poverty of the masses.

Although sociology has shown considerable development—along its own lines, to be sure—in Latin America, it has not been widely recognized as a separate academic discipline as in the United States. In this country most of the larger colleges and universities offer to students major concentrations in sociology, and graduate schools include the field of sociology as a career toward which the student can aspire through advanced training and experience in research. In Latin America sociology has generally been viewed more as a supplementary subject to be included as an adjunct to other disciplines. In most universities it appears only as an introductory course in the law school, or in the school of humanities as a course in the history or philosophy departments. It is rarely offered as an independent discipline.

There are a number of factors which may help explain the general lack of development of sociology as a major or independently considered discipline in Latin-American universities.

In the first place, most of these countries are poor, economically speaking, and this has implications for the universities. Since the financial support for universities comes almost entirely from governmental sources, and since there are many other governmental agencies and programs that compete for funds, it follows that universities generally operate on very slender budgets. They tend to adjust to this situation by rather rigidly

¹ For further information concerning the content of Latin-American sociology, see Harold E. Davis, *Social Science Trends in Latin America* (Washington, D.C.: The American University Press, 1950); John Gillin, "La situación de las ciencias sociales en seis países sudamericanos," in *Ciencias Sociales*, Union Panamericana, Washington, D.C., Vol. IV, No. 19: pp. 11-18; Alfredo Poviña, *Historia de la sociología latino americana* (Mexico: Fondo de Cultura Económica, 1941); Carlos A. Echanove Trujillo, *La sociología en hispanoamérica* (Mexico: 1953); L. A. Costa Pinto and Edison Carneiro, *As ciencias sociais no Brasil* (Rio de Janeiro: CAPES, 1955).

restricting their curricula to two broad groups of subjects: (1) those sciences which obviously have an applied aspect such as engineering, medicine, chemistry, and law; and (2) at the other extreme, those subjects which are not pointed toward making a living, but are of the type that might be classified as furnishing "food for the soul." The second group, generally referred to as the humanities, includes art, music, literature, philosophy, and possibly history. In this respect Latin Americans adhere somewhat to the attitude of the poet who is alleged to have said, "If I had but two loaves of bread, I would sell one of them in order to buy white hyacinths to feast my soul upon."

In between these two broad groups of subjects fall the social sciences, which are recognized neither as applied sciences nor as subject matter fit to be "food for the soul." Sociology occupies a sort of "no-man's land" into which the other disciplines penetrate occasionally but retreat again when other responsibilities become more acute.

Closely related to their financial problems is the structure of Latin-American universities generally. In the United States the first sociologists such as Giddings, Ward, Small, Ross, and Cooley held chairs in universities where their full time and energies were devoted to teaching, research, and writing in the promotion of their discipline. In other words, they were full-time sociologists engaged in teaching and research in their special fields. This pattern has continued to the present time.

In Latin America a very different situation prevails. Most professors in those countries are part-time employees who must make the major portion of their living on the side, frequently doing something completely different.² Such a scheme probably works reasonably well where professors in such fields as medicine, engineering, and law can bring their life experiences into the classroom and where there is a close relationship between their university work and their activities on the outside. As for the sociologist, however, there are few remunerative jobs outside the classroom that call for his professional services as a sociologist. Unless he accepts outside employment that is unrelated to his academic interest, he is likely to go "ill-fed, ill-clothed, and ill-housed." Therefore, few full-time sociologists can be found. Usually, someone in philosophy or history

² The rector of the National University of San Carlos in Guatemala City recently told the author there were not more than a half-dozen full-time professors on his entire university faculty. Practically all of the teaching is done by part-time persons who are paid at the rate of \$40.00 per course requiring three meetings per week. Classes are held in the mornings from 7 to 9 o'clock and in the evenings from 5 to 9. This gives professors the entire day for their other employment activities and also gives students a chance to work, since most of them could not otherwise attend college.

or law teaches a course in sociology on the side and, naturally enough, adapts it to the point of view of his own discipline.

Despite these obstacles, the last few years have seen a tremendous upsurge of interest in sociology in Latin America. More people are becoming interested in the subject, and it seems likely that its importance will be increasingly recognized in the universities and elsewhere. In the past the few sociologists who managed to maintain an interest worked largely in isolation, having little contact with fellow specialists. Recently, however, a number of sociological societies have been organized in the various countries, regular meetings are being scheduled, and papers presented on different aspects of their discipline. Sociological societies have now been organized in Argentina, Brazil, Mexico, Chile, Peru, Venezuela, Bolivia, and Nicaragua. Ordinarily, the membership in the various societies is small, varying from about a dozen to fifty or sixty members. It seems evident that the societies are destined to grow, however, and will become important instruments for rallying and stimulating interest in the promotion of sociology.³

A brief examination of the activities of the Mexican Sociological Society may perhaps indicate the possibilities. This society was organized in 1950 and now has forty members. It holds annual meetings during the first part of December, ordinarily in a different city each year. The first meeting was held in 1950 in Mexico City, and the second in Guadalajara in 1951. These first two dealt with general sociology. In 1952 the meeting was held in Monterrey and concentrated on criminology. The 1953 meeting, of which the general topic was educational sociology, was held in Mexico City again. In 1954 the sociologists met in Guanajuato and discussed economic sociology; and in 1955 at Morelia they dealt with rural sociology. A 1956 meeting was held in the city of Monterrey, and the general topic was urban sociology. Each year the society publishes a volume of proceedings containing the various papers submitted. Most of the other societies follow similar procedures, although the Mexican Society is perhaps a little further developed than the others. It seems likely that the exchange of ideas and the *esprit de corps* engendered at these meetings will go far to promote the development of sociology in Latin America.

³ A number of sociological journals are now being published regularly in Latin America. Some of these are sponsored by the recently formed sociological societies, others are sponsored by universities. Research institutes have been organized in a number of countries and these sponsor publications of various types. One of the more prominent, the Instituto de Investigaciones Sociales at the University of Mexico, publishes the *Revista Mexicana de Sociología* in addition to monographic studies. Special mention should also be made of La Escola de Sociologia e Política de São Paulo in Brazil, where both teaching and research in sociology are carried on extensively.

Inter-American cooperation in the form of international institutes and organizations likewise promises greater dividends for the development of the social sciences. There is now a Latin-American Association of Sociology, with which several of the national societies are affiliated.⁴ UNESCO with its International Association of Sociology has also helped to further sociology in Latin America. The Social Science Section of the Pan American Union provides a very useful service in publishing a current bibliography of all articles and books which might be of interest to Latin-American social scientists, because either they are of a general nature or the subject matter deals with Latin America. The *Instituto Indigenista Inter-Americano* has affiliated organizations in most of the countries that have a large Indian population. The Inter-American Society of Anthropology and Geography has stimulated interest not only in their own disciplines but in related social and economic fields as well.

The Fondo de Cultura Económica in Mexico has been helpful in translating into Spanish and publishing many of the books and studies made by North Americans and others. These books are put out mostly in paper binding and are made available to Spanish readers at a cost which the average Latin-American student and scholar can afford. Among the works translated into Spanish and published recently are Kaufmann's *Methodology in the Social Sciences*, Lundberg's *Social Research*, MacIver's *Social Causation*, and Pauline Young's *Scientific Social Surveys and Social Research*. These titles would seem to indicate a growing interest in the scientific aspects of sociology.

Another organization that is important in helping to train competent scholars and technicians is the Inter-American Statistical Institute. Through its efforts many young Latin-American students have been brought as internees to the United States to study methods of collecting and analyzing statistical data. Joint efforts were exerted toward greatly improving the methods and content of the 1950 censuses of population in the various Latin-American countries. The results have been rewarding. Many countries now have trained statisticians in their census offices, and prospects are bright for continued efforts to improve the methods of census-taking and analysis.

⁴ This Latin-American Association has headquarters in Buenos Aires and has held three congresses—at Buenos Aires in 1951, at Rio de Janeiro in 1953, and at Quito in 1955.

SOCIAL ASPECTS OF THE BRITISH NATIONAL HEALTH SERVICE

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How to maintain health and how to prevent and cure diseases have been age-long problems. Until two centuries ago, however, little progress had been made. In England the expectation of life in 1910 was 55 years. When smallpox and plague were rampant, the figure was much lower, but in 1955 it had risen to 71 years. It is the story of 50 years of health and medical service.

In view of the conditions then prevailing, the Royal Commission of 1909, through its minority report, presented plans for various types of social insurance. Accordingly, a health insurance program was begun in 1912. This, however, covered employed persons only. It left other members of a family and unemployed persons without protection and forced them to incur such medical bills as they could afford and were willing to assume.

Public health measures and provision for medical care once operated in separate categories. Doctors, as a whole, were concerned with the curative rather than the preventive aspects of disease. The statistics revealed an enormous amount of physical incapacity among the insured population. Before World War II in Britain it amounted to nearly 25 per cent of the number. Sentiment in favor of a more comprehensive insurance system gradually developed. Health service, like education, must be available and open to all, young and old. Acceptance by the state of responsibility for the health of the people equally with education has become the nation's watchword in Great Britain.

In 1944 Sir Winston Churchill said disease must be attacked wherever it occurred and everybody—regardless of means, sex, age, or economic condition—should have equal opportunities to receive up-to-date medical care. Disease must be attacked, whether it occurs among the poorest or the richest people, on the ground that it is a public enemy.¹

The study by Sir William Beveridge and his associates which gave the country the celebrated report entitled "Social Insurance and Allied Services" has inspired legislative leaders to promote far-reaching plans for various types of welfare programs. Any plan for social security, says the

¹ James Sterling Ross, *The National Health Service in Great Britain* (London: Oxford University Press, 1952), p. 4.

report, must involve certain assumptions, one of which is the need of a comprehensive health and rehabilitation service.

The plan known as "Assumption B" is briefly analyzed in the Beveridge Report but not presented in detail. It maintains that a health service should be established which will provide for every citizen such medical treatment as he needs and in the form he requires. It should insure dental, ophthalmic, and surgical care, also midwifery and infant care. Where needed it should be provided without pecuniary requirements in individual cases. The Report mentions the relative popularity of dental and ophthalmic treatment and appliances under the health insurance program and recommends that these benefits become available for all as forms of free service. Additional recommendations are made in respect to institutional care, surgical appliances, nursing, and postmedical rehabilitation. The details of such a service could have been incorporated in a bill for legislative action, but this task was not considered as falling within the scope of the report.²

Action to implement the suggestions of the Beveridge Report was taken by the Labor Government, which assumed control after World War II. The health insurance system was abandoned, and in 1948 the National Health Service law began to operate. The chief features of the law were the following:³

The establishment of a comprehensive health service designed to secure improvement in the mental and physical health of the people and to make it available to everyone.

Funds are to be provided by the National Exchequer, some from the National Insurance Fund, and incidental amounts from certain charges for service.

Drugs, surgical appliances, dentures, hearing aids, medicine, and other material needed for medical or dental treatment were to be supplied gratuitously by the National Health Service.

The choice of doctor was left to the desire of the individual with the privilege of veto by the doctor.

The rule for the selection of a dentist was less rigid and deviation from the general plan was allowed.

Doctors and dentists were to be paid on the capitation basis.

Plans for the domiciliary (institutional) care of mental patients, mental deficient, and others needing hospital care were adopted.

The charge by the vendors of drugs and prescriptions was standardized.

The development of an ophthalmic service which tested eyes and furnished glasses was instituted.

The local health authorities were to provide infant welfare clinics, antenatal and postnatal service, vaccination, immunization, dental service,

² Sir William Beveridge, *Social Insurance and Allied Services* (New York: The Macmillan Company, 1942), pp. 158-63.

³ Joseph Whitaker, *Almanac*, 1957 (London: Whitaker, 1957), pp. 1131-32.

home nursing, aftercare of the sick, and day nurseries. (Other items or sections of the law need not be outlined, since this paper is interested largely in the problems and accomplishments of the service in the few years following its establishment.)

All these provisions of the National Health Service, outlined above, were at first to be carried out without charge to the patient. An initial adjustment under the new law was the transfer to the Ministry of 2,688 of the 3,040 hospitals in the country. Room was made in certain hospitals for some pay patients who were treated separately by physicians.

The first gain from the operation of the law occurred in the eye clinics. Ross says that within nine months over 5,000,000 persons had their eyes tested.⁴ A similar rush occurred to the dental clinics, which were soon so flooded that the immediate needs could not be met. Care of teeth and of eyes is neglected all over the world, due partly to indifference, partly to the cost of treatment, and also to the discomfort associated with the process. Free service gave everyone an opportunity to benefit from the law and have their needs cared for. Hearing aid centers were established and a certain type of aid was supplied.

The rush of millions for service of various kinds was construed by cocksure critics in the United States as proof that the system was a failure, that it actually increased disease instead of reducing it as had been measurably accomplished under the old insurance laws. What actually occurred was that countless numbers of people received treatment that they had long needed but for which they had been unable to pay. These gains at once redounded to the virtues of the system, but they also increased the price of the services.

The actual expenditure amounted to more than 400,000,000 pounds—a serious drain on the Exchequer. The cost was not greater than the amounts needed by the people for adequate medical care, but now they were assessed against the government. Many Americans hoped that the new system would be abandoned when the Conservative Party was returned to power. However, no such change occurred. The system was continued because its results were being justified. But additional money for its operation was needed. Accordingly, in 1951 and 1952 certain minimum charges were made for medicine and various other items.

A charge of one shilling was required for ordinary prescriptions. The figure on elastic hosiery was five shillings or more. In May 1951 a charge of ten shillings was imposed for a lens and its frame, but one pound for a complete pair of glasses. Children, however, were served without cost.

⁴ Ross, *op. cit.*, p. 273.

These charges and others for replacements due to carelessness substantially reduced the pressure on the eye clinics. Likewise, in 1952 a charge of one pound was made for a denture or full price if cost was less, but no charge was imposed on persons under twenty-one or on expectant mothers. These and perhaps other small charges were made after the cost of requisite materials had risen and some visits to doctors and clinics were found to be unnecessary.⁵

Several phases of the work of the National Health Service call for special attention.⁶ In 1948 the deaths from tuberculosis numbered 21,993. A program of mass radiography and of faithful attendance of affected people at the clinics disclosed an enormous amount of previously undiscovered incipient tuberculosis. The hospitals could not carry the burden, and the Ministry arranged with two Swiss sanatoria to take a given number of persons and treat them according to methods used there. This policy was maintained for four years, but by that time the British hospitals were enlarged, effective treatment was carried out, and the volume of tuberculosis had shrunk so rapidly that the fatal cases in 1955 were only 6,492. This tremendous transition from many to few cases was due to a variety of reasons, but much of the credit can be claimed by the Health Service. The attack on this disease in these years was so formidable that tuberculosis became a minor cause of worry.

The English population has been notorious for its dental deficiencies. One out of five adults is toothless and the great majority of children have dental defects. The new service brought swarms of both children and adults to the dentists and dental clinics. During the years 1952-55, under the operation of the new law, each year about 1,210,000 received plastic or vulcanite dentures. Many million pounds were expended to outfit the needy adults. The treatment of school children has lagged behind the need, but in 1955 a total of 610,000 children were reached, and conservative treatment such as filling teeth, extracting some teeth, and orthodontic service began to predominate.⁷ Experiments also are being made to discover the feasibility of fluoridation. Success of this plan in certain American cities has prompted earnest effort in this direction.

Defective hearing is another condition that people are slow to remedy. Again there was a rush for aid under the new law. Hearing aids numbered about 42,000 in 1948 but rose to 428,500 by the end of 1955. In

⁵ Whitaker, *op. cit.*, p. 1131.

⁶ Report of the Ministry of Health, Part I (London: Her Majesty's Stationery Offices, 1956), pp. 20-21.

⁷ *Ibid.*, p. 217.

that year 53,617 aids were granted.⁸ These could be obtained from 64 hospitals scattered about the country.

Compassion for the permanently crippled has also taken a practical form. Power-propelled tricycles to the number of 10,479 were in operation in 1955 and thus gave a certain amount of mobility for formerly helpless individuals.⁹ Artificial limbs are also supplied to the extent of about 11,000 each year. In 1955 8,865 artificial eyes were also supplied. The Ministry also includes in its report the issuance of a large number of wigs—a form of public service not common in this country.

Needs connected with mentally abnormal and mental deficiency cases (known in this country as insane and feeble-minded) continue to remain comparatively serious. Too few available beds posed the first problem. Many buildings were old—some more than 100 years old; the equipment was faulty and utterly unfit to meet the needs of the new procedures. Prejudice against admission to the present-day hospital is now declining and many voluntary mental patients are being admitted. Such patients usually represent initial abnormality and are quite responsive to treatment. Psychiatric work in the local communities has also proved very helpful. Some day hospitals have been established for psychiatric patients who come for day care and service but return to their homes at night. Owing to insufficient accommodations, the Health Service was at first burdened with a long waiting list, but increased facilities and greater promptness in finding cases have lessened it. Nevertheless, it still remains uncomfortably high—7,000 in 1955. The ratio of nurses to patients has been 1 to 6.5 in mental hospitals and 1 to 6.9 in institutions for the feeble-minded, proportions considered inadequate. In the same year the mental hospitals were overcrowded to the extent of 18,000 patients.¹⁰

The demand for better eye care has developed.¹¹ In 1953 a total of 4,211,000 eyesight tests were made, in 1954 the number was 4,441,000, and in 1955 it was 4,770,000. It is clear that a sizable proportion of the English people not only are in need of glasses, but are having them provided by the Ministry. A late increase in costs of production and handling of cases has required an additional charge of three pence per case—a figure too small to constitute a burden on the patients.

The registration of blind and partially blind shows that the majority are over 70 years of age. According to official reports, not a single case of blindness due to ophthalmia neonatorum occurred during the year.¹²

⁸ *Ibid.*, p. 117.

⁹ *Ibid.*, p. 22.

¹⁰ *Ibid.*, p. 17.

¹¹ *Ibid.*, p. 76.

¹² *Ibid.*, p. 136.

This fact should be convincing disproof of the imputation that the doctors, nurses, and other health officials are apathetic and indifferent to the welfare of their patients. About 11 per cent of the so-called blind are employed. Additional efforts are being made through the local authorities to find additional employment for the partially seeing.

Immunization programs continue to operate. Compulsory vaccination for small children, however, was abandoned by the new service and voluntary service recommended. The proportion of cases served fell at once to 20 per cent of the former number—a dangerously low figure—but publicity suggesting the desirability of vaccination has raised it substantially. Indifference is partly due to the fact that smallpox has been practically eliminated, no deaths having occurred in recent years. An increasing proportion of children are also receiving immunization against diphtheria. Special efforts are also being made to reduce other contagious children's diseases. The most erratic of these is measles, which varies its disease rate more than 100 per cent from year to year but causes relatively few fatalities.

The great gains in its health program made by the new National Health Service have been chiefly in respect to afflictions which the populace has formerly been able to endure such as defective eyesight, deafness or hearing difficulties, physical handicaps, dental caries or toothlessness, and mental abnormalities. These afflictions, although nonfatal in their consequences, had seriously handicapped a large proportion of the people by making normal life and occupational efficiency impossible. In meeting these physical needs the service has been significantly successful.

In conducting the new services about 20,000 of the total of slightly more than 21,000 physicians have cooperated.¹³ Most of the dentists have likewise participated. The situation in respect to nurses is not quite satisfactory, since a sufficient number cannot be obtained. Both doctors and dentists continue to be paid according to the capitation plan. In April 1957 their remuneration was increased by 5 per cent.

The general health conditions of Great Britain in 1955 are indicated in the following statistics:¹⁴ infant mortality—24.9 per 1,000 living births; maternal mortality—54 per 1,000 living and still births; life expectation—68 years for males, 73 for females. Comparative figures for the United States are:¹⁵ infant mortality—26.6 per 1,000 live births; maternal mortality—48 per 1,000 live births; life expectation (whites,

¹³ *Ibid.*, p. 52.

¹⁴ *Ibid.*, Part II, pp. 22-27.

¹⁵ Statistical Abstract of the United States, 1956 (Washington: Government Printing Office, 1956), p. 66.

computed 1949-51)—66.3 for males, 72 for females. These figures nearly coincide and demonstrate that the British Health service is earnestly carrying forward its projected program.

Preventive and curative services are now combined under the new system. The Public Health Administration has been transferred to the National Health Service. Accordingly, prevention and cure travel side by side. The best way to reduce the cost of service is to prevent disease and physical disabilities. The National Health Service recognizes the fact and acts accordingly. The minor charges made from time to time were needed partly to obtain an additional income and partly to prevent unnecessary visits by patients, particularly the chronic sick. A recent study of 3,866 patients visited at home showed that 1,449, or 37 per cent, could be cared for at home. Methods of reducing the burden on doctors and clinics are in operation, but many inducements are also given to patients needing treatment.¹⁶

Among the immediate needs of the service, three are receiving special attention: better provision for existing hospitals, reconstruction of out-dated institutions, and adequate care of old people.

It is estimated that about 2,000,000 individuals make use of the service every day.¹⁷ Great Britain has no desire to abandon the plan. Some modification in method and perhaps in cost must be made, but the objectives stated so succinctly by Sir Winston Churchill remain. Medical care must be made available for all and without substituting poverty and minimum subsistence levels for the sake of temporary health improvement. Universal health insurance contributed through taxation has supplanted a system that could not serve the majority. It has made possible service available to all. In other words, all of the people together give service to all. Health is now considered a social value similar to education. Quite apart from the possibilities of such a system in other countries, the British National Health Service is without doubt improving the health and physical condition of the English people.

¹⁶ *Report of the Ministry of Health, Part I*, p. 25.

¹⁷ *Ibid.*, p. vi.

THE TREATMENT OF LAW IN AMERICAN SOCIOLOGY

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It appears that there is increased interest in bridging the gap between law and the social sciences, and to a considerable extent this interest is taking the form of empirical research.¹ To what degree does recent thought in sociology provide guidance for such effort? How much and what kind of emphasis has law had in sociology in the United States? This paper, based mainly on a content analysis of selected recent American sociological literature, provides data for partial answers to these questions. Except where so indicated, the material was published during the 1945-54 decade.

AMOUNT AND NATURE OF MATERIAL

Introductory Texts. Most of the introductory sociology texts published during the period include at least a brief discussion of the place of law in society, but there is no mention of it in 2 of the books.² The mean number of pages given to law in 23 beginning college texts is 3.3; the median is 3.0.³ With slightly over 12 pages, MacIver has easily the most material on law in this group.⁴ In the books as a whole, approximately four fifths of the space is devoted to general discussions of the nature and functions of law; some attention is given to such other topics as law and social change, difficulties in enforcing laws, reasons for conformity to law, and comparative law. Some of the books refer to the content of particular laws—such as those pertaining to divorce, crime control, or race relations—but the figures given here do not include such material where it is presented in relation to topics other than the role of law in society.

¹ E.g.: Studies in law and the behavioral sciences, financed by a \$400,000 Ford Foundation grant, are being conducted at the University of Chicago Law School. During the summer of 1956 the Social Science Research Council sponsored a postdoctoral research training institute in Law and Social Relations at the Harvard Law School.

² J. B. Gittler, *Social Dynamics* (New York: McGraw-Hill Book Company, 1952); and T. C. McCormick, *Sociology, An Introduction to the Study of Social Relations* (New York: The Ronald Press, 1950).

³ Evidently there were 24 introductory texts printed during 1945-54; only one could not be located for the analysis.

⁴ R. M. MacIver, *Society* (New York: Rinehart and Co., Inc., 10th printing, 1947), pp. 292, 329-33, 344-47, 358-63.

Theory Books. Of the theoretical treatises by American sociologists during the 1945-54 period, the greatest number of pages given to law as part of society is 33.⁵ Two of the books have no discussion of law at all, and 1 almost none; but the treatments in the other 5 are several pages longer than in most of the introductory texts. The mean for the 8 theory books is 12.6, as compared with 3.3 for the introductory volumes. Perhaps the difference is not this large, however, as suggested by the following qualifications of the discussions in the theoretical treatises.

Nearly two thirds of Davis' treatment involves a discussion of property rights; and, although the material is explicitly related to the role of law in social organization, the inclusion of all of it might be questioned. Sorokin's "law-norms" are defined broadly enough to mean all explicit social rules. Only about half of his 28 pages deal with "official law-norms"; the remainder deal with other aspects of formal social control.⁶ Interestingly, Parsons had evidently not considered law to be of much importance in sociological theory prior to his being asked to address the Law School of the University of Chicago. In the resulting essay he suggests that the legal profession is "one of the very important mechanisms by which a relative balance is maintained in a dynamic and rather precariously balanced society."⁷ Nearly half of the total material on law in the theory books is devoted to lawyers as a professional group or to property law, so that a smaller proportion of the total space is devoted to discussions of the general significance of law in society than is the case in the introductory texts. While it is true that theorists give more space to law than introductory writers do, on the average, some omit it entirely, and it can hardly be said that the analysis of legal institutions has a recognized place in American sociological theory.

Books on Social Control. Within the area of social control in sociology there is some treatment of law, but the interest is uneven. In the 1941 edition of the book edited by Roucek, there are 8½ pages on the subject, with the making, interpreting, and enforcing of laws receiving major attention.⁸ LaPiere has 12 pages on law; but his definition is broad enough to include status-group norms, and most of his treatment

⁵ Kingsley Davis, *Human Society* (New York: The Macmillan Company, 1949).

⁶ P. A. Sorokin, *Society, Culture, and Personality* (New York: Harper & Brothers, 1947).

⁷ Talcott Parsons, *Essays in Sociological Theory* (Glencoe, Illinois: Free Press, 1954), p. 385.

⁸ Floyd A. Cave, "State, Law, and Government," in Jos. S. Roucek (ed.), *Social Control* (New York: D. Van Nostrand Co., Inc., 1947), pp. 79-98.

concerns informal social controls and the rules of nongovernmental organizations. He believes the laws of governments have little effect on the conduct of modern man, and he virtually denies the existence of "formal law" and government. He writes that the assignment of the "juridical function" to specialists, in complex groups with many norms, promotes group stability by establishing precedents; but he applies this concept only to small groups, nowhere relating it to politically organized groups or any large organization.⁹

Two 1939 books in this field were being used in the postwar decade, those by Bernard and Landis. Bernard, in a chapter on custom and law, suggests the conditions under which legal control has advantages in maintaining order. He includes a chapter on legislation and calls for legal reforms.¹⁰ Landis devotes much less space to law, considering it to be rather superficial and impotent because it lags so far behind other social changes.¹¹ In the 1956 revision of his book, Landis allots nearly 13 pages to law, again stressing its weaknesses as a social control. He says law is increasing in importance, however, and mentions some specific changes in legal processes which he believes would make it a more effective control device.¹²

In 1954 Weber's writings on law were translated and published as a book in this country.¹³ The only books on the sociology of law so far published in the United States—those by Ehrlich, Timasheff, Gurvitch,¹⁴ and Weber—have been translations or restatements of material prepared much earlier in Europe.

The Journals. The general sociology journals in recent years have printed only occasional articles concerning law in society. From 1945

⁹ Richard T. LaPiere, *A Theory of Social Control* (New York: McGraw-Hill Book Company, 1954), pp. 19-24, 69, 168-71, 316-18.

¹⁰ L. L. Bernard, *Social Control in Its Sociological Aspects* (New York: The Macmillan Company, 1939), pp. 552-84, 586-615, 625-27.

¹¹ Paul H. Landis, *Social Control: Social Organization and Disorganization in Process* (Philadelphia: J. B. Lippincott Company, 1939), pp. 171, 183, 288-93, 355-56.

¹² *Ibid.*, 1956 edition, pp. 258-68, 444-47.

¹³ Max Rheinstein, *Max Weber on Law in Economy and Society* (Cambridge: Harvard University Press, 1954). The core of this thought had already been brought to the attention of American sociologists in two translated works a few years earlier: Max Weber, *Essays in Sociology*. Translated by H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1946); Max Weber, *Theory of Social and Economic Organization*. Translated by A. M. Henderson and T. Parsons (New York: Oxford University Press, 1947).

¹⁴ Eugen Ehrlich, *Fundamental Principles of the Sociology of Law* (Cambridge: Harvard University Press, 1936); N. S. Timasheff, *An Introduction to the Sociology of Law* (Cambridge: Harvard University Committee on Research in the Social Sciences, 1939); Georges Gurvitch, *Sociology of Law*, (New York: Philosophical Library, 1942).

to 1954 the *American Sociological Review* carried 5, an average of 1 every 12 issues, or perhaps 9 articles if questionable cases are included. The *American Journal of Sociology*, *Social Forces*, and *Sociology and Social Research* each had from 2 to 4. Nearly all of the articles published in the *Journal of Legal and Political Sociology*, during its four-year existence from 1942 to 1946, dealt with political matters rather than with the processes of legal control.

THE DEFINITION OF LAW

A test was made of the hypothesis that more American sociologists in effect adopt the Roscoe Pound definition of law as "social control through the systematic application of the force of politically organized society"¹⁵ than define law more broadly (after the fashion of the European legal sociologists) to mean all formal social control or both formal and informal control. A summary of the types of definitions of law in the introductory, theory, and social control books published during the 1945-54 decade, plus the two 1939 books on social control, shows that the hypothesis is supported for the literature analyzed. Over two thirds of the definitions given, or nearly four fifths if the somewhat ambiguous ones are omitted, restrict law to that formal social control which is exerted by governmental agencies. The tabulation also indicates that the definitions of law in sociology are not highly consistent with each other, that they are oftentimes ambiguous, and that it is not uncommon to discuss law without defining it.

Analysis called for the rejection of a hypothesis related to the matter of definition, that most sociologists conceive of the legal system in terms of criminal law only. This is apparently true of only 5 of the 23 introductory writers, and of none of the authors of the general theory and social control books. Many civil as well as criminal law examples are referred to in the various treatments.

LAW AND SOCIAL CHANGE

The role of law in social change is very often treated inconclusively in recent sociology, and there is disagreement among those who present a definite view. The following statements illustrate opposite conclusions: "Official law, then, always lags somewhat behind unofficial law."¹⁶ "The

¹⁵ R. Pound, "Sociology of Law," Chap. 11 in G. Gurvitch and W. E. Moore, *Twentieth Century Sociology* (New York: Philosophical Library, 1945), p. 300.

¹⁶ Sorokin, *op. cit.*, p. 82.

dogma that law always lags behind the times is like most other unqualified generalizations about social change—strictly untrue.”¹⁷

The majority of those whose treatments can be classified hold that law may either lead or lag behind other changes. (This may actually be the approach of some of the writers who were classed as saying that law only leads or that it only lags; not all of these stated a firm conclusion, and in fuller treatments they might give examples in the opposite direction.) This view involves the attempt to identify the *conditions* under which law leads and under which it lags—the most fruitful approach, since examples of both types are not difficult to find.

The further question of the effectiveness of legal control in situations involving social change is discussed in only 10 of the entire 35 books. Except for Landis' stress on the impotence of law when its methods and content lag behind other changes, these treatments depict law as leading changes in the mores. The Sumnerian conclusion that the mores always govern when they conflict with law is stated without qualification in only one instance.¹⁸ In the other 8 the position is that law can be enforced when it is a leading element, under certain conditions, and that it is capable of bringing about changes in the culture. Some of the writers state that law often facilitates peaceful change and thus the maintenance of relative stability. One specific suggestion is that laws cannot be enforced when they are opposed to firmly established mores, but that laws can mold conduct when the mores are conflicting.¹⁹ Another is that laws are not enforceable if they either lead or lag behind other changes too far, and that a law can increase conformity to a new norm if it is supported by “a part of public opinion.”²⁰

DOCUMENTATION

Only a partial attempt was made to determine systematically the type of documentation of the material here discussed. All of the generalizations about law in several of the introductory books were listed, and later only new points or particularly interesting statements of previous ones were recorded. This arbitrary procedure resulted in the listing of 104 instances in which a proposition about law is stated.

¹⁷ Davis, *op. cit.*, p. 70.

¹⁸ John F. Cuber, *Sociology*. 2nd edition (New York: Appleton-Century-Crofts, 1951), pp. 128-29.

¹⁹ R. L. Sutherland, J. L. Woodward, and M. A. Maxwell, *Introductory Sociology*, 4th edition (Philadelphia: J. B. Lippincott Company, 1952), p. 29.

²⁰ R. Freedman, A. H. Hawley, W. S. Landecker, and H. M. Miner, *Principles of Sociology* (New York: Henry Holt and Co., 1952), pp. 171-72. The statement is made on p. 171 that “Law is such an important part of the sanctions of modern society that it deserves special consideration.”

In only 20 of these 104 instances is there any documentation of the generalizations, the method being to cite secondary authority. In no case is there a direct reference to an empirical study. Illustrations are offered in 21 of the 83 cases of nondocumentation. It is the writer's impression that the results would be about the same if there were a complete tabulation of all the generalizations in the introductory texts, and also the works on theory and social control. The sociology of law books by Ehrlich, Timasheff, Gurvitch, and Weber are rarely cited, perhaps mainly because they are oriented toward Continental law and European sociology rather than Anglo-American law and American sociology.

Some persuasive arguments can be marshaled in favor of limited documentation in beginning texts and even in general theory books; but there is the danger that the student might conclude that a proposition is supposed to be true in sociology because somebody asserts it "in a book" or an example or two can be set forth. If one wishes to document a sociological treatment of law fully, he finds little to draw upon, especially if he seeks reports of empirical studies.

SUMMARY AND CONCLUSION

In the recent (mainly 1945-54) book and periodical literature of general sociology in the United States, and in treatises on social control, law receives rather little attention. Writers of theory devote more space to law than introductory writers do, on the average, though nearly all of the latter attempt some discussion of it. Some theoreticians omit law entirely, and it seems clear that it does not have a well-recognized place in sociological thought. One current writer on social control (Landis) considers law to be relatively impotent, though increasing in importance and capable of having more influence if it can be modified a good deal. Another (LaPiere) follows in the footsteps of Comte and Ward in his disdain of "formal law."

The majority practice among American sociologists is to define law as the formal social control exerted by governmental agencies, though some use it to mean all formal control and one social control theorist even includes informal control. Many writers use ambiguous definitions, and more still discuss law without defining it.

Sociologists are not agreed as to the role of law in social change; many treat the matter ambiguously, and many do not discuss it. In contrast to statements that law always leads or lags, the majority of the writers who discuss the problem believe law can either lead or lag behind other changes; and some make the attempt to identify the conditions of lead

and lag. Most of those who discuss the further matter of the effectiveness of law in situations involving change contend that law can be enforced when it is ahead of the mores, under given conditions, and that it can bring about cultural changes.

The conceptions which we American sociologists have of our discipline and of law are such that we feel compelled to make at least occasional statements about the functioning of law in society. Why is there such a dearth of systematic thought and research in this area? This question cannot be answered fully here, but probably the explanation lies mainly in the nature of the division of intellectual labor among the disciplines of political science, law, and sociology in the United States. At any rate, we can at present neither discharge our responsibility in the division of labor nor provide adequate knowledge of law for the student of social control and other pertinent areas of sociological theory.

SEX DIFFERENCES AMONG JUVENILE COURT REFERRALS

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This paper deals primarily with a series of comparisons between boys and girls referred to the juvenile courts of the state of Washington between 1953 and 1955.¹ More specifically, this study attempted to test the findings of Wattenberg and Saunders regarding sex variations in delinquency reported in this journal, by obtaining related evidence on this question.² These investigators examined police department complaint cases in Detroit. They found that more female cases were, in general, from broken homes or homes in which a significant amount of parent-child hostility was apparent, while male cases were not as extensively from such a background. Other sex variations were discovered with respect to offense patterns, peer group relations, community facilities, and other items. These data suggested that the average female delinquent was significantly more involved than the average male in personal and social maladjustment beyond the behavior bringing her to the attention of the police.

The present writers attempt to throw additional light upon the Wattenberg and Saunders findings, using data which differs somewhat from that of the Detroit investigators.

This is not an analysis of all cases of delinquency, but only of court referrals.³ These cases represent the more serious complaints coming to the attention of police and other agencies.

¹ The authors wish to acknowledge the assistance given by the staff of the Section of Research and Statistics, Department of Institutions, Washington State, in the preparation of this research.

² William B. Wattenberg and Frank Saunders, "Sex Differences Among Juvenile Offenders," *Sociology and Social Research*, 39: 24-31, September-October 1954.

³ Court cases represent only a small part of the total juvenile violations occurring each year. Two separate studies, one in Washington, D.C., and the other in the Seattle area, have shown that less than half of the cases of delinquency known to public agencies come to the attention of the juvenile court. See Edward E. Schwartz, "Community Experiment in Delinquency Measurement," *National Probation Association Yearbook*, 1945, p. 173; Mayor's Juvenile Advisory Council, "The Initial Report of the Mayor's Juvenile Advisory Council, Seattle, Washington, January 1955," mimeographed report published by the City of Seattle, Seattle, Washington, 1955, pp. 3-9.

DATA AND METHOD

The subjects of this study consisted of all children referred between 1953 and 1955 to juvenile courts in Washington state. Not all of the cases were first referrals, as over 20 per cent of the group had also been referred prior to 1953. However, this research reports characteristics of children referred during the 1953-1955 period *at the time of first referral in this period*.

The collection of state-wide statistics of juvenile court cases began in 1952. The reporting is not complete for all thirty-nine counties in the state, but it has been progressively expanded since 1952. The data for 1953 were based upon thirty-one counties, while the data for 1955 were based upon thirty-five counties. The total number of cases upon which this analysis was based varied from 18,416 to 18,783, due to the varying numbers of children in the "not reported" category on different items. The ratio of males to females was approximately 3.5 to 1.

The basic data of this study consisted of various single items of information which were cross-tabulated according to a research plan developed earlier. For example, a number of items were cross-tabulated by sex and by type of offense. These tables were then tested for statistical significance of differences by the chi-square technique. All differences significant at the .05 level or greater are reported in this paper, but most of the differences were significant well beyond the .001 level. These significant sex differences and other variations are reported below, grouped into sections having a common basis.

FINDINGS

Race and Age. In 1950, 97.5 per cent of the ten- to nineteen-year-old population in the state was white, 2.5 per cent was nonwhite. Delinquency referrals were not reported in comparable proportions, for court cases included more than the expected numbers of nonwhites. Seven per cent of the referrals in this study were nonwhite.

Females were most strongly overselected from the nonwhite group. Ten per cent of the girls and 6.1 per cent of the boys were nonwhite in this delinquent sample.

The data of this study regarding age-sex variations were in agreement with those of Wattenberg and Saunders.⁴ Males tended to be both younger and older than females. That is, 14.5 per cent of the boys but only 7.7 per cent of the girls were under thirteen, while 20.1 per cent

⁴ Wattenberg and Saunders, *op. cit.*, p. 30.

of the boys and 15.4 per cent of the girls were over seventeen years of age. This age-sex variation held as well for white and nonwhite subgroups.

Negroes tended by comparison with other groups to be reported at an earlier age. Over 20 per cent of the Negro males were under thirteen, as compared with only 14 per cent of the other males. The per cent of Negro females under thirteen was 15.1, as opposed to 7 per cent of the other females.

Source of Referral. Police and other law enforcement officers referred 88.6 per cent of the cases in this study to the courts. Males were reported by the police to a greater extent than females, as 91.5 per cent of the males and 78.6 per cent of the females were reported by police. This variation held as well for racial subgroups. The percentages of white boys and girls referred by the police were 91.4 and 77.8; for Negroes, 90.4 and 82.4; for Indians, 93.9 and 87.2; and for other races, 94.9 and 79.2.

Males and females who had not been referred previously were more likely to be referred by police than those who had been previously referred. Of the boys referred previously, 88.9 per cent were referred by police, as compared with 92.3 per cent of the males not previously referred. The percentages for girls were 68.2 and 81.6. It would appear that initial contact with the court functions to alert agencies other than the police to surveillance of juvenile behavior.

Reason for Referral. Offenses were grouped into five categories in this study: (1) thefts of various kinds and acts of carelessness or mischief, (2) running away and ungovernable conduct, (3) sex offenses, (4) use of liquor, and (5) all other offenses.

The boys and girls in this study evidenced a distribution by offenses which paralleled national data. That is, females were concentrated in the running away and ungovernable category (46.1 per cent), while males were concentrated in the theft and mischief category (64.3 per cent). Girls were involved in relatively more sex offenses than boys, 9.8 per cent as compared with 4.7 per cent. Boys and girls were involved in other offenses in about the same proportions.

These male and female patterns remained when the subgroups of white and nonwhite boys and girls were examined. The males in both of these groups were most involved in theft, while the females were most often involved in running away and ungovernable conduct.

In their research, Wattenberg and Saunders reported that female cases were most similar to males in terms of offense patterns at an early

age, but became more divergent with increasing age. In this study, the age groups under thirteen, thirteen through sixteen, and seventeen and over were studied. Females under thirteen had a pattern of offenses most similar to that of boys, committing acts of theft or mischief in 35.4 per cent of the cases. After age thirteen, running away and ungovernable conduct were most important for females. Thefts and mischief were most common for males at all ages.

For both males and females, use of liquor was an important offense for juveniles seventeen years old or older. These offenses made up 27.4 per cent of the male cases and 22.2 per cent of the female cases in this age group.

Source of Support. In the group studied here, 92.2 per cent of the boys and 87.7 per cent of the girls were privately supported, while the remainder were supported, at least in part, by some form of state aid. Higher percentages of males in each offense group were privately supported than in the case of females. The highest percentages of both males and females privately supported were found in the liquor offense category, 95.0 and 91.5 per cent respectively.

Family Living Situation. For this group of referrals, 57.3 per cent of the boys and 42.2 per cent of the girls were living with both parents. Boys were selected from unbroken homes in higher percentages than girls in all offense groups. The highest percentages of both males and females from unbroken homes were in the liquor offense category, 61.4 and 50.9 per cent respectively. The lowest percentages for both boys and girls were found in the running away and ungovernable conduct category, 42.2 and 36.6 per cent respectively.

School Attendance. The males in this study attended school in relatively larger numbers than females, as 81.4 per cent of the boys and 76.3 per cent of the girls were in school. Not only did males attend school in greater numbers, but their attendance was superior to that of girls. Of the boys, 87.5 per cent had a pattern of regular attendance, while only 75.6 per cent of the girls attended school regularly. The proportions of girls with poor attendance records exceeded those of males for separate offense groups as well.

Type of Disposition. Even though the offenses reported here represent a selection of more serious complaints against juveniles, 47.7 per cent of the cases against boys and 49.9 per cent of the complaints against girls were dismissed. Girls were somewhat more likely to be dismissed from court jurisdiction than boys, but those girls who received some other disposition tended to be committed to institutions in relatively larger numbers than boys. In this study, 11.3 per cent of the boys and 25.8 of the girls not dismissed were sentenced to an institution.

SUMMARY

This paper has shown that female court cases in Washington state were more likely to be nonwhite by comparison with boys. Females were more likely to be reported by some source other than police, to have been involved in running away and ungovernable conduct offenses, and to have been publicly supported. In addition, girls were more likely to have been from broken homes and to have been either out of school or an attendance problem in school. Finally, those female cases which were not dismissed were more likely to result in commitment than in the case of males. Thus, the thoughtful reader might conclude that the data suggest that girls were more likely to show maladjustment other than the immediate circumstances bringing them to the court than would be true of males. The cautious reader will note, however, that except in the case of broken homes, none of the "unfavorable" items characterized more than half of either girls or boys.

It would, of course, have been useful to have analyzed items of information showing the quality of home life, teachers' evaluations of students, and other such data. It is to be hoped that court reports will involve larger amounts of this kind of data in the future. Meanwhile, the present data seem sufficiently valuable to be reported here.

THE INTRODUCTORY COURSE IN STATISTICS FOR SOCIOLOGISTS

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This paper does not purport to be an answer to the problems facing teachers of introductory courses of statistics for sociologists but will try to structure some of the problems of such courses and consider some of the alternatives.

It is needless to labor the importance of statistics to sociology or whether or not students in sociology should take statistics. We assume that statistics is a necessary course for the training of sociologists. I do think that we might spend a moment considering why statistics is a course so generally dreaded by sociology students. At the undergraduate level, introductory sociology frequently fails to challenge and attract students with ability in handling symbolic and quantitative materials. These students are more likely to be attracted into mathematics and the physical sciences. I think that too frequently our introductory courses in sociology do not give sufficient emphasis to the importance of quantitative materials and methods. A stressing of the importance of quantitative methods in sociological research and an indication of the employment opportunities for people with such qualifications would probably aid in recruiting people with needed abilities. I have been encouraging several friends of mine who teach mathematics to call to the attention of their students some of the advantages and possibilities of combining mathematics and social science at the undergraduate level as a background for graduate work. I think it is clear that we need to recruit more graduate students in sociology who have a background in mathematics and also need to encourage more graduate students in statistics to minor in sociology.

Looking directly at the first course in statistics for sociologists, let us consider the basic purpose, or purposes, of such a course. There are several: (1) to show the student the utility of statistics in sociology as a means of summarizing data, making estimates, and testing hypotheses; (2) to teach the student some of the fundamental statistical processes, not just as computing techniques but as ways of answering certain sorts of questions in certain sorts of situations; (3) to show the student the relationship between sociological theory and statistical methods;

and (4) to interest the students in learning more about statistics as a basic research tool. There are many other purposes, of course, but these seem to be some of the basic ones.

This leads us into one of the basic questions regarding the introductory course in statistics for sociologists: Who should teach the course? or, to put it differently, What department should offer the course—the department of sociology, the department of mathematics, the department of statistics (if one)? In many cases the sociology student gets his first course in statistics in economics or business administration. While the quality of any course depends on the person teaching it, it is less desirable in general for the first course in sociology to be in economics or business administration than in sociology, mathematics, or statistics. If the first course in statistics were made part of the mathematics requirement of the first two years, it would be ideal in many ways. However, as part of a mathematics requirement the course would be unlikely to give sufficient emphasis to applications. In general, if sociologists get their first course in statistics in the mathematics department as a general introductory course in mathematical statistics, it is unlikely that they will see the possibilities which statistics offers to sociology. The approach is likely to be too theoretical, although there are many exceptions. The purposes stated above cannot be met most effectively in the department of mathematics. In most cases these purposes would seem to be met most effectively by a course in the department of sociology or a statistics department.

The question of *where* a course is offered is not independent of *when* it is offered, that is, at the graduate or undergraduate level. I don't think anyone would question the ideal of having the first course in statistics at the undergraduate level. In fact, the basic ideas of statistical inference should be part of the general education of the first two years of college.

The idea of having statistics as a required course for all undergraduate sociology majors is not easy to achieve and perhaps should not be required in all cases. In many schools the department of sociology is the major department for those students who are interested in a general education and in getting a husband. Colleges have a responsibility to such students, so far as a general education is concerned, and it is a disservice to everyone to try to make research workers of them. They might be offered a choice between statistics or an introductory research methods course, as at the University of Michigan.

While ideally we should like all sociology students to have their first course in statistics at the undergraduate level, we must be realistic and face the fact that many of our graduate students begin graduate work without any statistics. The main question in this situation is whether or not graduate credit should be given for the first course in statistics. While many graduate schools do give graduate credit for the first course in statistics, the trend is away from this, and more and more graduate schools require a course in statistics for entering or as a penalty course. Whether graduate credit is given for the first course in statistics or whether it is taken as a penalty course at the graduate level, the important consideration is that it not become merely a hurdle as the language requirement has become in many situations.

Another problem facing those offering the first course in statistics for sociologists is the question of mathematics prerequisite. As we mentioned earlier, sociology does not generally attract people with mathematical training. While we should like to require calculus as a prerequisite for the first course, we must be realistic and realize that college algebra is all we can expect. The problem is usually those students who cannot handle college algebra adequately and have trouble with square roots, decimals, and fractions. Requiring students to pass an examination on Helen Walker's *Mathematics Essential for Elementary Statistics* (New York: Holt, 1952), as is done at the University of Chicago, seems to be an excellent solution to this problem.

The most difficult problem for the teacher of the first course in statistics is the question of material to be covered and the organization of this material. A survey of a dozen statistics courses for sociologists indicates a fairly wide diversity of material covered. Part of the diversity is due to the fact that in some departments only one course is required while in others two or more courses are required. This affects the material covered in the first course to some extent.

A majority of the courses usually begin in logical fashion with measures of central tendency and dispersion. As logical as this approach is, it does not capture and hold the student's interest to any extent and usually the problems of learning the computational procedures are sufficiently arduous to overshadow the utility of the procedures, especially since the real value of the procedures lies in more advanced statistical methods.

Some students and several textbook authors have indicated that beginning with analysis of variance, mainly as a computational procedure, captures the student's imagination and interest. At the beginning of the course none of the details of the method can be elaborated, but the

utility of the method for answering certain kinds of questions can be demonstrated. Also the value of the mean standard deviation and variance is demonstrated and motivation provided for learning detailed computational procedures.

There are doubtless other techniques that would provide the same sort of motivation as analysis of variance. The point is that we should probably try to provide some such motivation at the beginning of the course before starting on measures of central tendency, dispersion, and other less interesting aspects of statistics.

As stated in the purposes, the introductory course should also show the student the relationship of social theory to statistics and to the statistical design of research projects. For example, students should realize that the statistical methods used should depend on what the substantive theory says about the form of the distribution of the variables under consideration. One should not assume that a variable is normally distributed simply because some of the statistical methods he knows assume normality. The methods used should depend on the theoretical nature of the variables.

In a complex analysis of variance one need not compute all possible interactions but should decide which ones are theoretically meaningful, unless, of course, it is purely an exploratory study. Students must be taught not to use statistical methods blindly as statistical clerks but as tools to help answer significant research questions. For example, individual variation is usually used as the error term in an analysis of variance, and yet whether the individual variation or the interaction is used as error should be determined by the substantive nature of the problem and the population to which one wishes to generalize the conclusion. The first course should make students aware that statistics is a tool to be used and not a master to be served.

To attempt to suggest what topics should be covered would be presumptuous. As suggested earlier, the topics covered depend on the sequence of courses into which the first course fits. It is important that the first course not be the terminal course for graduate students in sociology. They should be left with the feeling of need for more knowledge of statistics and, ideally, with a drive strong enough to move them to improve their background in mathematics as a prerequisite for further statistical training.

AREAL MOBILITY AND MENTAL HEALTH ON OAHU

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Areal mobility has long been suspected of being a major factor in mental disorder rates. Faris and Dunham reported a significant clustering of certain types of schizophrenia in Chicago neighborhoods marked by high population mobility, and suggested that such mobility greatly intensified social isolation and thus led to mental breakdown.¹ Gerard and Houston, in a study of schizophrenics in Worcester, noted that rates were highest in areas populated chiefly by unmarried migrants to the city.² A recent review of Buffalo data, in contrast, specifically "fails to confirm the theory that the high rates in poor sections are the result of recent migration into those areas of mobile men who live alone."³

The present study investigates the relationship between mental disorders and areal mobility on the Island of Oahu, that is, the Honolulu Standard Metropolitan Area. It has already been remarked that Honolulu is geographically unique among American cities, and hence provides an excellent testing ground for ecological theory.⁴ In addition, census tract statistics regarding migration and mobility have been published in somewhat greater detail (showing, for example, place of birth of the native-born population) for Honolulu than for mainland cities. Such considerations make a study based on Honolulu data particularly valuable.

Mental hospitalization, long-term mobility, and short-term mobility rates were computed for each of the forty-two Oahu census tracts. The mental hospital rate was defined as the average annual number of first admissions to Territorial (mental) Hospital, 1948-1952, per 1,000 noninstitutional civilian residents, 1950.⁵ Long-term mobility was

¹ Robert E. L. Faris and H. Warren Dunham, *Mental Disorders in Urban Areas* (Chicago: University of Chicago Press, 1939), pp. 98-109, 173-77.

² Donald L. Gerard and Lester G. Houston, "Family Setting and the Social Ecology of Schizophrenia," *Psychiatric Quarterly*, XXVII: 90-101.

³ Rema Lapouse, Mary A. Monk, and Milton Terris, "The Drift Hypothesis and Socio-Economic Differentials in Schizophrenia," *American Journal of Public Health*, 46: 978-86 (August 1956).

⁴ Robert C. Schmitt, "Illegitimate Birth Rates in an Atypical Community," *American Journal of Sociology*, LXI: 476-77 (March 1956).

⁵ Robert C. Schmitt and Harry K. Lee, "The Geographical Distribution of Mental Disorders on Oahu," *Hawaii Medical Journal*, 14: 414-15 (May-June 1955).

measured by the percentage of the civilian population of each census tract born outside of the Territory of Hawaii; short-term mobility, by the percentage of civilians in each tract living in a different house in 1950 than April 14, 1945 (V-J Day).⁶ Still another rate, dwelling units built during the five years immediately preceding the Census as a percentage of all units reporting year of construction, was used in conjunction with the data on short-term mobility to indicate the degree to which such mobility was a result of new growth in an area.⁷

There was little association between long-term mobility (the percentage of civilian residents born outside of Hawaii) and mental hospital admissions rates. The zero-order coefficient of correlation was only 0.09, a value well below that required for significance at the 5 per cent level. With short-term mobility (the percentage of civilian residents occupying the same house in 1950 as in 1945) held constant, the coefficient of partial correlation was 0.29—a higher value, but still not significant at the 5 per cent level. Between the two measures of areal mobility, incidentally, there was a correlation of only 0.48.

A somewhat closer association was found between short-term mobility and mental hospital admissions rates, but in this case the correlation was negative. The zero-order correlation coefficient was -0.31 , and significant at the 5 per cent level. With long-term mobility held constant, the coefficient of partial correlation amounted to -0.41 , likewise significant at the 5 per cent level. When the proportion of dwelling units built during the preceding five years was held constant, thereby adjusting for areal mobility resulting entirely from growth of the tract, the partial correlation coefficient was -0.19 . With both long-term mobility and new construction kept constant, the correlation between mental hospital admissions rates and short-term mobility was -0.29 . Neither of the last two figures was significant at the 5 per cent level.

Even in combination the two measures of areal mobility showed limited association with mental hospitalization rates. The multiple correlation coefficient between admissions rates (the dependent variable) and long- and short-term mobility (the independent variables) was 0.417, a figure which, while statistically significant, explained only 17 per cent of the statistical variation resulting from both forms of mobility.

⁶ Computed from the U.S. Bureau of the Census, *U.S. Census of Population: 1950*, Vol. III, *Census Tract Statistics*, Chapter 62, table 1. To compute a strictly civilian rate by census tract, it was necessary to assume that all military personnel (given in *ibid.*, table 2) reported place of birth and 1945 residence, all were born outside of the Territory, and all lived in a different house in 1945 than in 1950.

⁷ Computed from *ibid.*, table 3.

Inclusion of new construction as an additional independent variable raised the multiple correlation coefficient only slightly, to 0.427.

The foregoing correlations should be interpreted with considerable caution. There are several reasons for such a warning:

1. Data were restricted to a five-year period for a single metropolitan area. Important differences might appear if the analysis was extended to other periods or communities.

2. The dangers of ecological correlation, especially when based on a limited number of cases (forty-two census tracts in the present instance) are well known.

3. The mental hospital admissions rate used in this study is an extremely crude measure of mental health. It omits untreated persons or those receiving treatment from private psychiatrists or in general hospitals. No breakdown by type of disorder was possible, and data necessary to standardize rates for age, race, and sex were not obtainable.

4. The measures of long- and short-term mobility chosen for this analysis are likewise somewhat limited. Recent arrivals from Los Angeles or Seattle are grouped with natives of rural Luzon as long-term migrants, and both of the above may be combined with same-block movers as exhibitors of short-term mobility. In the aggregate, however, these crude indices appear to be reasonably accurate measures of intertract differences in areal mobility.

Even after allowing for the above shortcomings in method and data, the correlations found between mobility and mental health seem quite low. Areas with populations of high long-term mobility or low short-term mobility tended to have high mental hospital admissions rates, but neither relationship was free from numerous exceptions. The two measures of mobility in combination left as much as five sixths of the variation in hospitalization rates unexplained.

These correlations seem especially unimpressive in view of the high coefficients computed for other variables presumably associated with mental health. Between mental hospital first admissions rates and population per net residential acre, for example, the zero-order correlation was 0.74.⁸ Other variables significantly correlated with the mental hospital rate were the proportion of divorced or widowed persons ($r = 0.59$), the civilian unemployment rate ($r = 0.53$), the proportion of dilapidated dwelling units ($r = 0.53$), the proportion of units with 1.51 or more persons per room ($r = 0.51$), the percentage of families

⁸ For a more extended investigation of the role of population density in mental health, see Robert C. Schmitt, "Population Densities and Mental Disorders in Honolulu," *Hawaii Medical Journal*, forthcoming.

and unrelated individuals with incomes less than \$2,000 ($r = 0.35$), and the percentage of married couples without their own household ($r = 0.33$).

Whatever the reason, it is evident that areal mobility is associated to a very limited degree with mental hospitalization on Oahu. It is recognized that no correlation, in itself, is proof of either a causative relationship or lack thereof. The low coefficients reported for both long- and short-term mobility, however, in conjunction with the much more impressive correlations computed for other variables, suggest that the relationship between mobility and mental health may be less important, at least in some communities, than heretofore assumed.

RELIGIOUS PRACTICE AND PERSONAL ADJUSTMENT OF OLDER PEOPLE*

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Religious practices are not, of course, limited to churchgoers. Attendance at church, however, is an objective, measurable religious activity and may be assumed to be related to the acceptance of religious beliefs. For some older people religion, as expressed in religious activity or practice, may be a crutch or an escape mechanism as it probably is for many insecure and unhappy people. In an attempt to study some of the relationships between religious practice and personal adjustment, people over 65 in a working-class Chicago community were asked a number of questions about their religious practice and personal adjustment. Cluster sampling was used in an area containing seventy enumeration districts. Dwelling units in chosen districts were visited, and only one person over 65 was interviewed in any one dwelling unit. Interviewees numbered 6.5 per cent of the 4,511 older persons in the area and corresponded closely to the population of older persons in terms of distribution by sex, age, marital status, citizenship, and national origin. The findings reported here are based upon the answers of the 108 men and 102 women in the sample who were Catholics and physically able to attend church. The religious behavior and the adjustment of the Catholics were studied because the criteria of their religious practice were more objective than those obtainable for the other subjects in the study.

The religious activity of the Catholic includes two practices considered essential by the Catholic Church. One is the obligation to attend Mass on Sunday; the other is the requirement to receive Holy Communion at least once a year, but preferably as often as possible. While there are other requirements for remaining in good standing in the Catholic Church, these basic ones are readily measurable and can be used as a limited but workable index of the Catholic's religious practice. The index rated Catholics who attended Mass daily or weekly high in church attendance, and those who attended Mass less than weekly were rated low. Daily to monthly reception of communion was rated high, and less frequent reception of communion was rated low. The very few

* I wish to thank the members of the Research Seminar, School of Social Work, especially Mr. Thomas Brown and Mrs. Elizabeth Detrick for their contributions to this paper.

subjects who did not answer either or both of these questions were rated low in either or both practices. The subjects were then divided into three groups: the "more active" in religious practice, those rated high in both Mass attendance and the reception of communion; the "medium," those rated high in one practice and low in the other; and the "less active," those rated low in both practices. Half of the subjects were "more active," 34 per cent were "medium," and 16 per cent were "less active." Among the women 62.7 per cent were "more active" in the practice of their religion, compared with 37.9 per cent of the men. Also, fewer women were less active than would have been the case if only chance had governed their distribution. Religious practice was significantly related to sex at better than the 1 per cent level.¹

Did age affect religious practice? Subjects between 65 and 75 were compared with those over 75. While 45.5 per cent of those under 75 were more active in the practice of their religion, 67.4 per cent of those over 75 were more active. Thus among those physically able to participate in religious activities, there was a tendency for religious practice to be related to increased age.

Were those who claimed that religion had become more helpful to them in the last ten years more active in practicing their religion? Religion had become more helpful to 49 per cent of these older people, remained the same for 6.6 per cent, and had not become more helpful for 35.2 per cent. Practice was most active among those for whom the helpfulness of religion had been relatively constant. Of those for whom religion became more helpful, 61.2 per cent were in the religiously more active category, compared with 28.4 per cent of those for whom it had not become more helpful.

Religion could easily serve as an escape for lonely older people who have lost family and friends and keenly feel the impact of loneliness. In fact, however, did more of the lonely older people turn to religion? Forty-eight per cent of the religiously more active people reported that they felt lonely, as did 55 per cent of those who were less active. The slight tendency for less active subjects to be lonely was not significant. Since 44 per cent of the lonely people were more active in the practice of their religion compared with 55.7 per cent of those who were not lonely, the lonely apparently did not use religion as an escape.

One might also ask whether unhappiness has anything to do with the practice of religion. The subjects had reported whether they felt very happy, moderately happy, or less happy. More than half of the very happy were more active in the practice of their religion compared

¹ Tables showing the distribution of subjects may be obtained by writing to the author.

with 34 per cent of those in the medium and 11 per cent in the low activity group. The moderately and less happy showed a somewhat similar pattern with 47 and 44 per cent more active, 32 and 38 per cent medium, and 21 and 18 per cent less active. Although happier people were somewhat more active in the practice of religion, the less happy and moderately happy were not too different from them. The less happy obviously had not plunged into religious activity as an escape.

It is often assumed that those who identify themselves with a church are churchgoers and practitioners of the religion with which they identify themselves. Data on church identification are not necessarily meaningless in studies of religious, political, or other behavior, but must be used with caution. Individuals may reflect the attitudes of a cultural subgroup to which they have belonged, especially if they still choose to be identified with it, but identification with a church cannot be equated with adherence to its tenets and used as a basis to talk about "Catholic" or "Jewish" political behavior, for example, as if political behavior in some way stemmed from religious belief. Although all the subjects in this study had identified themselves with a church, they differed considerably in terms of church attendance and the meaning they ascribed to religion. Based upon an examination of answers to questions about the meaning of religion, subjects' attitudes toward religion were classified as positive, negative, or neutral. Of those with a positive attitude toward religion, 71 per cent attended church weekly, while at the other extreme 80.8 per cent of those with a negative attitude attended church seldom or never. The tendency for attitude toward religion and church attendance to be related was significant at better than the 1 per cent level. Mere identification with a church or a statement of religious preference would not have provided an adequate criterion for separating churchgoers from nonchurchgoers, practitioners of a religion from non-practitioners.

This study revealed some interesting facts about the religious practices of some older people. It showed that women were significantly more active in the practice of their religion than men and that religious activity tended to increase as people grew older. However, older people who were lonely or unhappy did not turn to religion more than other older people. Furthermore, although all subjects identified themselves with one church, their religious practice and attitude toward religion varied greatly. This illustrates the real limitations of questions about church membership in studies of attitudes and behavior. In view of the increasing number of older people in our society, the role religion plays in their lives and its relation to personal adjustment merit further and much deeper investigation.

THE EVOLUTION OF HOUSING

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In the Taos, Bandelier, and Mesa Verde regions of northern New Mexico and southern Colorado are found many evidences of the evolution of human housing. The various evidences, while scattered and piecemeal, may be put together in a related order of development, for comparison with related evidences in other parts of the world.

It appears that people lived on earth for a long time before they ever thought of a house as it is conceived today. They lived a long time before they learned how to build a house. The house in one sense is a rather late invention in human history on earth. Its development had logical and natural prehousing backgrounds and it underwent various stages before reaching its present form and function.

1. *The Pit Dwelling.* One of the earliest antecedents of the house was the pit dwelling.¹ Pit dwellings, as this type of prehousing has been called, were developed at one time in Mesa Verde. The simplest type of pit dwelling was a hole dug in the ground and covered with boughs and sticks, reeds, and coarse grass as a "roof." A fire was built in the center, but the smoke from it must have been almost unbearable. The "roof" offered inadequate protection from rain and snow and from cold and heat. Protection from marauders was scanty. It is difficult to see how babies and small children could have survived.

However, the ingenuity of people showed itself even under harsh conditions. It showed itself in important inventions. It demonstrated how necessity may be the mother of new advances in human living.

In Mesa Verde National Park may be seen today tangible evidences of what might be called advanced types of pit dwellings. There may be found unwitting suggestions of what today is called a house, which in its evolution included one invention after another over possibly centuries of time.

In the advanced type of pit dwellings to be seen in Mesa Verde rough-shaped stones were used for walls to restrain the dirt sides of the room from caving in, and boughs of trees were used for roof beams and for posts to hold up the roof. A most interesting invention was the vertical ventilator shaft that was dug to one side of the room to a depth parallel

¹ Except in certain tropical regions where tree-houses early evolved for security reasons of one kind or another.

with the floor of the room. Then it was continued by a horizontal tunnel that connected with the room. When the fire in the center of the room heated the surrounding air, it, together with some of the smoke, rose upward and escaped through the opening in the roof that served as a "door." At the same time cold air, being heavier than warm air, was drawn down the ventilator shaft and into the room, giving a supply of fresh air ready to be heated and helping to push the smoke up and out.

A neat invention was the deflector stone. It was a slab placed in front of the horizontal "tunnel" from the ventilator shaft. It served to keep the incoming current air from putting out a flickering fire. More important, it served "to spread out" the cool fresh air to different parts of the room. It dissipated a "draft of cold air."

2. *The Cave Dwelling.* The cave dwellings found in Bandelier and Mesa Verde represent an improvement over pit dwellings. There are three main types of cave dwellings. The first was relatively simple in structure. It consisted of one small room, about 6 by 9 feet and 5½ feet high, that was carved by hand with crude stone implements out of the precipitous stone wall of a canyon, as were many of the cave dwellings in the north wall of El Rito de los Frijoles in Bandelier.² Usually these cave dwellings were made in relatively soft rock of volcanic origin called "tuff." Sometimes erosion cavities were made into cave rooms.

The cave room had a small opening for an entrance, about 18 inches wide and 3 feet high. A marauder could be repulsed by a thump on the head with a heavy club. Generally there was an opening near the ceiling through which some of the smoke could escape. However, much smoke remained in the cave room, judging by the blackened, sooty walls. In some of these rooms a plaster made of clay and water was used as a coating over a sooty wall; several layers of soot between layers of plaster are sometimes found, indicating a long struggle with the problem of sooty walls. In Bandelier along the north wall of the canyon there are two miles of these cave rooms. The north wall was chosen partly because of the warmth received from the sun and partly for protection from north winds, by virtue of caves facing south.

Many evidences of a second and more advanced type of cave dwelling may be considered as an invention in which a room with three walls was built of stones and mortar against a cave wall within which a room had previously been made and used. This annex room, as I have chosen to call it, enabled the occupants of a cave room to move out into a room

² Bandelier National Monument is located northwest of Santa Fe near Los Alamos and was named in honor of Adolf Bandelier, a Swiss archaeologist, who spent a number of years exploring that area.

with better air and less smoke. It is possible that a cave room was used for storage purposes, that it could be viewed as a kind of forerunner of the modern clothes closet in which a great variety of things are stored, sometimes to overflowing.

Small boughs were used as roof beams for the annex room. These beams made possible fairly substantial roofs. A hole in the roof served as an entrance way and a crude ladder was used to reach the roof. By pulling up the ladder, protection against marauders was obtained. The size and shape of these annex rooms can be seen in Bandelier from the foundation stones and the small holes cut in the rock wall for the ends of the roof beams.

When another room was needed, the wall of an annex room already built in addition to the cliff wall was used, requiring the building of only two new walls. In some cases two- and three-story rooms were built; and in some, rooms were built out from the cliff wall two and three rooms deep. The ruins of "Long House" in El Rito de los Frijoles are seen to wind along and around the canyon's steep sides continuously for about a seventh of a mile. It represented the construction of 200 rooms or more, and has been referred to as the longest house ever built by man.

The third type of cave dwelling was more advanced and complicated than the earlier types. The people utilized large natural caves, seen so abundantly in Mesa Verde. Rooms were built out of stones and mortar, adjoining one another, sometimes two, three, and more stories high along the front of a large cave. It is estimated that at least 1,000 caves in Mesa Verde were so utilized. The frontline appearance today, eight centuries or more after these dwellings were built, is castlelike. The inner rooms were dark and used for storage purposes. Probably more than one clan lived in some of the caves, and in a few cases a cave housed an entire village.

The largest of the cave dwellings in Mesa Verde is "Cliff Palace." It is 325 feet long, 100 feet deep (extending back into the cliff), and it contained 200 rooms and 23 kivas (special underground ceremonial circular rooms). Through the course of time the people who lived on the Mesa in pit dwellings moved down into the natural caves in the sides of cliffs along the precipitous walls of the twenty or more canyons extending up into the Mesa from the south. These natural caves gave better protection than the pit dwellings not only from the heat of summer and the cold of winter but especially from enemy groups. They could be reached only by narrow and tortuous trails of several hundred feet from the canyon floor, or by sliding or crawling down the overhanging brow

of a precipice. Sometimes ladders were needed to get down the face of a precipice; sometimes it was necessary to crawl through a narrow tunnel or push one's way through a slot between boulders.

Considerable skill must have been shown in building these stone dwellings, made with crude stone implements and with clay mixed with water for mortar, that enabled them to withstand the weathering processes of heat and freezing, of driving rain and sleet during the centuries since they were deserted about 1280 A.D. The castlelike appearance of the stone buildings of a village along the front of a cave when viewed from across a canyon is impressive and in the moonlight awe-inspiring. One wonders what the daily life of the people was like and what were their social activities, some of which the writer has summarized elsewhere.³ In the museums at Mesa Verde, in Santa Fe, and elsewhere, are diaramas giving details in a three-dimensional way of the daily life of these stone-age folk.

3. *The Apartment House.* Since the rooms of the cliff dwellings adjoined one another, the ensemble constituted a kind of proto-apartment house. However, when people built rooms adjoining both at the side and on top of previously built rooms on a canyon floor and away from canyon walls, an early type of apartment house became clearly recognizable and reflected a considerable advance in the evolution of housing.

Tyuonyi, the circular apartment house that was built on the floor of the canyon of El Rito de los Frijoles (Bandelier), probably had its origin in a row of connected rooms constructed in a circle around a courtyard; another row was built outside and attached all the way around to the rooms of the first row, then a third and a fourth row; then a row on the top of the first and second ground rows, then a third story of rooms. Entrance to the rooms of this circular apartment house was made only from inside the courtyard, but entrance to the courtyard was made through a passageway sixty feet long, with a narrow semi-circular entrance that could be guarded by a sentry.

This circular apartment building probably was constructed over a considerable period of time beginning around 1300 A.D., and is judged to have been occupied by a village of possibly 300 men, women, and children. The apartment house on the open floor of a canyon was a new adventure in housing, well protected from enemy attacks. Stone and mortar and adobe were used. The result was much more healthful than the pit dwellings or the cave dwellings. It was easy of access for friendly neighbors. Farming could be carried on in the canyon all about. Small

³ "The Social Life of the Cliff Dwellers," *Sociology and Social Research*, 41: 214-21.